

Date: Thu, 28 Jan 93 16:29:05 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #128
To: Info-Hams

Info-Hams Digest Thu, 28 Jan 93 Volume 93 : Issue 128

Today's Topics:

 Advice on coax cable sources and prices?
 DSP and the Future
 General Class Licence - HELP!!!!
 Hamtronics receive/transmit converters?
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 Profanity (was:Re: Endurance)
 Protective case for HTs
 QRP and QST
 Re: Real NoCodes_, Now CW and reality
 Real NoCodes
 Using electrical outlet ground as earth ground?????

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Tue, 26 Jan 1993 19:39:07 GMT
From: spsgate!mogate!newsgate!usenet@uunet.uu.net
Subject: Advice on coax cable sources and prices?
To: info-hams@ucsd.edu

Greetings all...

Several members of our club have decided to go together and purchase a
quantity of coax cable. We're looking for around 1000' of Belden 9913.

Does anyone out in net-land have any advice on good sources for that quantity? So far, the best I've found is AES at about \$.46 per foot + shipping for 500' spools. HRO price is \$.69 per foot + sales tax but I haven't persued a quantity price from them. Other are around \$.50 per foot + shipping. Are these decent prices or can 9913 be had for less elsewhere?

Any advice will be appreciated.

Thanks & 73... Mark AA7TA

Date: Wed, 27 Jan 1993 23:11:01 GMT
From: usc!sdd.hp.com!hpscit.sc.hp.com!hplextra!hpl-opus!hpnmdla!
alanb@network.UCSD.EDU
Subject: DSP and the Future
To: info-hams@ucsd.edu

In rec.radio.amateur.misc, Cecil_A_Moore@ccm.hf.INTel.COM (Cecil A Moore) writes:

>There's nothing magic about 455 KHz for an IF frequency. In the '50s,
>I had a Hallicrafters SX-??? that had a 50 KHz last IF frequency. Thus,
>instead of having to sample at 1 MHz, such an IF frequency could be
>sampld at 120 KHz or so, well within the range of present-day DSP chips.
>An added bonus is that the 50 KHz IF filters already have a sharply
>selective response.

You can also undersample a high frequency IF. For example, use an
18.01 kHz sample rate with a 9 MHz IF. The 500'th harmonic then falls at
9.005 MHz. So long as the 9 MHz crystal filter (roofing filter) has
negligible response above 9.005 and below 8.996 MHz, no aliasing will
occur.

Of course, this does require a 9 MHz crystal filter, one of the expensive
components you would like the DSP to replace. With a double-conversion
receiver with 50 kHz IF, you have a fair amount of circuit complexity
and filtering. There is no free lunch.

AL N1AL

Date: 28 Jan 93 02:23:04 GMT
From: zds-ux!bjstaff@uunet.uu.net
Subject: General Class Licence - HELP!!!!
To: info-hams@ucsd.edu

> Could someone tell a good way to prepare for the general class

> license? I am looking for a book that contains the material and
> the general class question pool. Also, some tapes for code.

I wasn't too impressed with the Gordon West materials. The ARRL General Class License Manual and the GGTE Morse Tutor (software) is good.

73,

```
+=====+
| Brad Staff                616-982-5791 (tel)      |
| Zenith Data Systems      616-982-5997 (fax)      |
| Hilltop Road             b.staff@zds.com        |
| St. Joseph, MI 49085     aa8if                  |
+=====+
```

Date: Thu, 28 Jan 1993 04:19:14 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!spool.mu.edu!howland.reston.ans.net!
zaphod.mps.ohio-state.edu!cs.utexas.edu!natinst.com!news.dell.com!swrinde!emory!
kd4nc!ke4zv!gary@network.UCSD.
Subject: Hamtronics receive/transmit converters?
To: info-hams@ucsd.edu

In article <1993Jan26.202519.27840@nntpd2.cxo.dec.com> little@nuts2u.enet.dec.com
(nuts2u::little) writes:

>Has anyone tried the Hamtronics 2 meter receive converter or 70 cm
>transmit converter? I'm also trying to find an inexpensive 70 cm
>linear amp to build to go with the transmit converter. There was a
>70 cm transverter and amp design in QST in late 1991, any
>experiences with those?

I had lots of trouble with the Hamtronics 70 cm receive converter.
The LO was very dirty and required considerable tweaking with a
spectrum analyser to be both clean and start reliably. Other people
have told me that they weren't pleased with it's performance either,
but hadn't the equipment to determine exactly what was the problem.
The crystal furnished with the kit was of low activity and the circuit
is intolerant of that. Your experience may be different depending on
the quality of parts you receive. The converter is IMHO a generally
weak design, subject to strong signal overload and requiring a hot
crystal. Their XV4 transmit converter seems to be better. I don't
have one, but several people I know have built them and they seem
to perform acceptably. Their helical filter GASFET preamps are quite
good, we use one on our repeater. So it's a mixed bag.

I haven't built the transverter in QST though a friend has. He hasn't
reported any problems with it. I did build the author's 902 MHz

transverter and it worked first time. I expect the 432 MHz design is sound as well.

>My goal is to build an OSCAR station for my parents with the least
>amount of cash outlay. I can loan (give?) them my old Kenwood R-599
>receiver and an HR-2510 10 meter transceiver, so I figured
>inexpensive receive/transmit converters would be the way to go. Any
>other suggestions that would let me get them up on AO-10/AO-13 for
>under \$300?

Aside from a transmit converter to 435 MHz, and a receive converter from 145.8 MHz, you'll probably need an antenna mounted GASFET preamp and a 100 watt amp. Of course you need steerable gain antennas for 2 m and 70 cm. The benchmark is the KLM 22C and 44CX with a Mirage D1010N. That will allow comfortable SSB contacts even when squint angles are poor. Under better conditions, 10 watts is enough power, especially if you're satisfied with CW contacts.

You'll want to build your own antennas to stay within budget, wooden 2x2 booms and aluminum clothesline wire elements will work, or a helix will be fine on 435 MHz. A Mirage would blow the whole budget by itself. A modest tube amp, say from an old commercial radio, GE or Motorola, that was re-biased to AB1 could get you the necessary power cheaply. You can build excellent GASFET preamps yourself and save \$60 right there. Feedline is important, and expensive. 9913 is the minimum cable for the uplink feed at \$0.62 a foot. RG-58 will do following the preamp if the run isn't too long. CATV hardline is an alternative for the transmit line. The loss is low and the cable is often free as a roll end from the local cable company. There have been several articles in the ham press about fashioning your own connectors from ordinary plumbing supplies. Don't sweat the VSWR mismatch. You can retune the antenna driven element matching network a bit and it will work fine.

Getting a functional SSB station for under \$300 is going to be quite a challenge. If you go with Campbell's transverter, you're looking at nearly \$200 for the kit. A 2 m receive converter is going to set you back another \$70 or so, and a preamp is \$79 if purchased, and close to \$20 if you build it yourself. You probably need \$60 of cable, and even the homemade antennas are going to run \$15-\$20 a piece unless you can scrounge the materials for free. Then you have to fabricate an Az-El mount for the antennas. Some pipe fittings and a Radio Shack tripod will do, but that's at least another \$30. Then there's still the matter of a power amplifier. Even the surplus tube conversion is likely to cost \$50. A budget of \$500-600 is more realistic unless your scrounging skills are very well honed.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

Date: 28 Jan 1993 05:06:05 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!spool.mu.edu!uwm.edu!cs.utexas.edu!
gerald.cc.utexas.edu!gerald.cc.utexas.edu!usenet@network.UCSD.EDU
Subject: HT power supplies - call for preferences
To: info-hams@ucsd.edu

In article <1993Jan27.223142.16725@ee.ubc.ca> niallp@ee.ubc.ca (niall parker)
writes:

...
>The best parameter to evaluate how long a battery will last is its
>capacity (typically measured in mAHr or AHr), not the pack voltage.
...
>
>Getting a high voltage pack seems like quite a waste to me, as it
>typically halves the battery capacity and the extra 3-4 dB of power
>very seldom makes a difference. For long life on my 2GAT I use a
>hi-density BP8 (1200 mAHr, 8.4 V) which lasts 40-50 hours use, while
>for a more convenient size, I use a 600 mAHr, 7.2 V BP2.
>
>Most of the time, the best battery to use is the smallest one that
>will last a day (though it is a good idea to have a spare somewhere!).
>Giant packs and external supplies just turn a convenient handheld into
>a poorly performing mobile.

Here, I'll have to disagree.

I use a Yaesu FT-530 (for a week now) and before that an FT-470. I never
bought a Yaesu (or after-market) battery for either radio. They're too ex-
pensive. I've found that a 2.4-amp/hour circular phone battery (That's cel-
lular for anyone who doesn't get it) works quite well. Just plug a standard
cigarette lighter type plug into it, throw it into a backpack (Being a student,
I always cary a backpack), and off you go. I didn't find it to be an incon-
venience at all. In fact, being a very heavy HT user, (It passes the time...
:-)) I find this alternative fits my needs very well. The batteries are cheap
(I got mine for \$7 at a local flea fest), they work well, and they don't weigh
a ton either.

73

--

Buddy Brannan, KB5ELV, Riff-Raff #4
Internet: davros@ccwf.cc.utexas.edu

"One foot in a brave new world, one foot still in bed ..."
--from Those Who Dig: "Mr. Banana Head"

Date: 27 Jan 1993 18:16:14 -0800
From: usc!howland.reston.ans.net!bogus.sura.net!darwin.sura.net!mojo.eng.umd.edu!
news.isi.com!news.isi.com!not-for-mail@network.UCSD.EDU
Subject: I love/hate Wayne Green!
To: info-hams@ucsd.edu

In article <1993Jan27.204709.5314@nnnnpd.lkg.dec.com> j_otterson@star.enet.dec.com
writes:

>

>I think Wayne Green should have been Ross Perot's running mate. B-)

Wayne Green *did* run for president or vice president in one of the recent
presidential elections (1984 or 1988). The newspaper article I read this
in claimed Green wasn't a legal candidate because he is a convicted felon
(tax evasion, I think).

--

Jerry Gardner (jerry@isi.com)		"Violence is the last refuge of
Integrated Systems, Inc.		the incompetant" - Isaac Asimov

Date: 28 Jan 93 00:07:20 GMT
From: amdcad!amdcl2!brian@sun.com
Subject: New Products
To: info-hams@ucsd.edu

In the Feb 93 QST, I saw the following new products that looked
interesting. I have no connections with either, but thought they were
unusual enough to call attention to:

Azden AX-21A, AZ-11, and AZ-61

6m and 10m HTs! (FM only) Azden is now in the HT business and
their first three offerings are HT's for 2m, 6m and 10m. I've
seen a lot of net requests over the years for a 10m HT. I
called for a price and the 2m is \$330, 10m or 6m is \$320.

j-Com MX series

HT's for 80m through 6m! (CW and SSB only) weight: 20oz incl.

batteries. 2 Watts, single band \$350

--Brian, N5PSS
--brian@amd.com

Date: Wed, 27 Jan 1993 22:47:05 GMT
From: usc!sdd.hp.com!hpscit.sc.hp.com!hplextra!hpl-opus!hpnmdla!
alanb@network.UCSD.EDU
Subject: No-codes
To: info-hams@ucsd.edu

In rec.radio.amateur.misc, mellob@cary115.its.rpi.edu (Elmer Fudd) writes:

> It's understandable that no-code technicians would be aggravated
> by being designated as such. This is why I refer to a no-code
> tech as simply a "Technician." And refer to a Technician as a
> "Technician Plus HF" or simply a "Tech Plus."

So how would you translate this sentence into Politically Correct language?

"No-code Technicians may not transmit on the 10 meter band."

The only way I can think of is:

"Non-Technician-Plus Technicians may not transmit on the
10 meter band."

Or maybe:

"Non-Technician-Pluss's may not..."

Either way, it's pretty awkward. Or maybe instead of "no-code" you could
say "Morse-impaired" -- sort of like "visually impaired" instead of "blind."

AL N1AL

Date: 28 Jan 93 14:44:42 GMT
From: usc!cs.utexas.edu!uwm.edu!linac!att!cbnewsc!cbfsb!att-out!pacbell.com!lll-
winken!catnip!kc6sss@network.UCSD.EDU
Subject: No-codes
To: info-hams@ucsd.edu

alanb@hpnmdla.sr.hp.com (Alan Bloom) writes:

>In rec.radio.amateur.misc, mellob@cary115.its.rpi.edu (Elmer Fudd) writes:

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>> by being designated as such. This is why I refer to a no-code
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>So how would you translate this sentence into Politically Correct language?

> "No-code Technicians may not transmit on the 10 meter band."

In order to legally transmit on the 10 meter band, a licenced amateur must have passed a Morse Code exam at a regular testing session either when he initially completed the exams required for his license or at some latter point in time.

The previous sentence covers everyone, no?

There is no such thing as a "Tech Plus" or a "Tech Minus" license, of course, just Technicians.

Some have passed Elements 2, 3 and 1A.

Some have passed only Elements 2, 3A and one of 1A, 1B or 1C. If they passed Element 1A, they may be holding CSCEs for successful completion of other elements.

Some of them have passed only Elements 2 and 3A and may even be holding CSCEs for other Elements.

Date: 28 Jan 93 16:04:12 GMT

From: usc!howland.reston.ans.net!zaphod.mps.ohio-state.edu!malgudi.oar.net!caen!
rphroy!link.ph.gmr.com!vbreault@network.UCSD.EDU

Subject: No-codes

To: info-hams@ucsd.edu

In article <14570603@hpnmdla.sr.hp.com> alanb@hpnmdla.sr.hp.com (Alan Bloom) writes:

In rec.radio.amateur.misc, mellob@cary115.its.rpi.edu (Elmer Fudd) writes:
> It's understandable that no-code technicians would be aggravated
> by being designated as such. This is why I refer to a no-code
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> "Technician Plus HF" or simply a "Tech Plus."

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Or maybe:

"Non-Technician-Pluss's may not..."

You're making it needlessly clumsy by using a double negative Al.

Howabout:

"The 10 meter band is only available to those Technicians that have shown the ability to receive Morse code at 5 wpm."

If you wanted to make it exclusionary then how about:

"Technicians may not transmit on the 10 meter band unless they have shown the ability to receive Morse code at 5 wpm."

For what it's worth, and lest anyone forget; I'm proud of my Extra Class license and use CW almost exclusively when operating on HF. However, I still fail to see where the ability to use Morse code has ANY bearing on one's ability to operate on the phone subbands. I would *MUCH* rather see the emphasis shifted off of Morse code and onto a more relevant subject. I *DO* agree that some amount of effort should be required in order to upgrade to higher classes of licenses. I believe that people value most those things that they had to sacrifice the most to obtain. Currently, the Morse code requirement meets that in principle, but it still isn't otherwise relevant.

... that's how I see it

--

-val-

Val Breault - GM Research - vbreault@gmr.com - N8OEF
Instrumentation dept., 30500 Mound Rd., Warren, MI 48090-9055
The opinions expressed by the author do not necessarily reflect
those of GMR or those of the General Motors Corporation.

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 \ /__|
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Date: 28 Jan 93 23:16:23 GMT
From: news-mail-gateway@ucsd.edu
Subject: Profanity (was:Re: Endurance)
To: info-hams@ucsd.edu

flloyd@l1-a.West.Sun.COM (Fred Lloyd [Phoenix SE]) writes:

```
>Over the last 20 years or so, our society has become more and more
>tolerant of "profane" language and one of the best examples is the
>medium which reaches 99% of all of us, television. Below are some
>of the things which I've seen/heard on BROADCAST TV:
>
>References to someone being "Pissed Off" - Civil Wars
>Telling someone to "Piss Off" - british term on "Are you Being Served"
>"I'm going to kick his ass!" - President Bush
>Use of the word "Dogshit" in a local TV news interview
>"God Damn" - LA Law - and Archie Bunker (who pioneered it)
>"Son of a bitch" - LA Law
>"I Farted" - Howie Mandel on Arsineo Hall Show
>"Kiss my ass" - Howard Stern on the Tonite Show
>"Fossilized Turd" - used to define the term "coprolite"
>
>Other words heard without particular references: Bastard, penis,
>hell, damn, slut, suck(s), "sit on it", etc.
>
```

What I can't believe is using "wuss" or "wussy" as a derogatory term; not only by adults but children on TV. When I was in college we used these terms as a tongue-in-cheek euphemism for "puss" and "pussy", and I'm not talking about cats.

```
Kris, AA5U0           '~ ~'
mr@rockdal.aud.alcatel.com  L
                             J
```

Date: Wed, 27 Jan 1993 23:52:11 GMT
From: pacbell.com!rtech!amdahl!amdcad!amdc12!brian@network.UCSD.EDU
Subject: Protective case for HTs
To: info-hams@ucsd.edu

Scott Richard Rosenfeld writes:

```
> I have noticed that companies no longer sell leather cases for their
> radios, just these little, junky, soft vinly cases that keep things dry for
> the radio but do nothing to protect the rig from bumping into things, like
```

> floors.
>
> Since the battery packs on these rigs are of different sizes, the radio can
> drastically change size, depending on the pack used. Anyone know of a case
> that adapts to the variable size of the radio, while still protecting the
> radio to some degree? Leather would be nice...
>
> Scott NF3I

Unless your doing something wrong, leather cases won't expand. :-)

Seriously, if you want a nice leather case for an HT and can't find one off the shelf, I'd suggest that you drop by your nearest shoe repair shop (or saddle shop, if in a rural area) and see what they would charge you for a custom made simple case. I recently had a camera case made this way for an old SLR camera. Including leather, total cost was under \$20. (It ain't perfect, but it's a lot better than nothing.)

Brian McMinn, N5PSS
brian@amd.com

Date: 28 Jan 93 22:26:52 GMT
From: news-mail-gateway@ucsd.edu
Subject: QRP and QST
To: info-hams@ucsd.edu

Jeff M. Gold, AC4HF says:

[good things about MFJ QRP rig]

and omitted to say he wrote a pretty cool 2 page article (in the New Horizons section) in Feb 93 QST about using his MFJ QRP rig.

If you haven't tried QRP then read his article -- it might dispel a few old ideas.

72/73 Kevin, N7WIM / G8UDP
a-kevinp@microsoft.com

Date: Wed, 27 Jan 1993 22:57:55 GMT
From: usc!sdd.hp.com!hpscit.sc.hp.com!hplextra!hpl-opus!hpnmdla!
alanb@network.UCSD.EDU
Subject: Re: Real NoCodes_, Now CW and reality

To: info-hams@ucsd.edu

In rec.radio.amateur.misc, jeffj@cbnews.cb.att.com (jeffrey.n.jones) writes:

>You know if you read the posts here you would get the impression that the
>CW portions of the various bands were devoid of any activity at all. In fact
>the exact opposite is true as they are crowded and extremely active! Can't
>tell you how many times I have given up trying to find a spot to call CQ
>and went over to the phone portions where there is much less activity.

Another factor is that, since CW signals take much less bandwidth than SSB,
the CW bands SEEM much less crowded than they really are. I once did a
study (admittedly a number of years ago) where I very slowly tuned the HF
bands, counting the number of different signals heard. I was careful to
tune at a constant number of kHz/minute so as not to bias the results.
I found that, counting the Novice bands, there were actually more CW
signals than SSB.

I suspect CW may have lost a little ground since then, but I bet the
ratio still isn't all that far from 50/50. And the CW bands are effectively
smaller now because of the increased space reserved for digital modes.

AL N1AL

Date: Wed, 27 Jan 93 20:13:49 EST
From: dog.ee.lbl.gov!overload.lbl.gov!agate!spool.mu.edu!sdd.hp.com!swrinde!emory!
wa4mei!nanovx!gloster!cutter@network.UCSD.EDU
Subject: Real NoCodes
To: info-hams@ucsd.edu

adam@wam.umd.edu (Adam L. Greenberg) writes:

> Following the flames I received for the last posting, this one is a little
> better for the newsreaders (sorry, Roy!)

> By the way, Mr.

> Call-Sign: KD1HZ	Class: ADVANCED
> Previously: N1LMB	Class: TECHNICIAN
> Real Name: MICHAEL P DEIGNAN	Birthday: DEC 31, 1964

>

> Was that a code or a no-code you started with?

>

> >-- Michael P. Deignan, KD1HZ

> > -----

> > - I'm not a bigot, -

> > - I hate everyone... -

> > -----

>
> Thank you for your input, Mr. Popularity. Lock yourself back in your room.
>
> --N3NKI
>

Gawd, I thought he was an old fart by his attitude, I was in college when he was born! And at hamfests and club meetings, I'm a youngster.

BTW, I'm a coded Tech who feels like I gained nothing for that portion of the experience.

cutter@gloster.via.mind.org (chris) All jobs are easy
 to the person who
 doesn't have to do them.
 Holt's law

Date: Wed, 27 Jan 1993 23:18:01 GMT
From: usc!sdd.hp.com!hpscit.sc.hp.com!hplextra!hpl-opus!hpnmdla!
alanb@network.UCSD.EDU
Subject: Using electrical outlet ground as earth ground?????
To: info-hams@ucsd.edu

In rec.radio.amateur.misc, stickler@klaava.Helsinki.FI (Patric M Stickler) writes:

>Does the ground socket of an electrical outlet provide a good (or at
>least reasonable) path to earth ground? I.e. would I be able to hook
>up a three prong grounded plug with the two hot prongs removed in
>order to connect my rig to earth ground via the electrical outlet?

It depends on what you want the ground for. If it's for a safety ground, this would work. (Although a better solution would be to replace the radio's line cord with a 3-wire type with 3-prong plug.)

If you have a problem with "RF in the shack" and need an RF ground, using the power ground is probably not a good idea. All you'll do is pump RF into your house wiring, possible causing RFI problems.

To cure "RF in the shack," eliminate feedline common-mode currents (that is, currents on the outside of the coax shield.) Balanced antennas, baluns, running feedline at right angles to a dipole, etc are some of the solutions. Another "brute force" solution is to add a 1/4-wave counterpoise wire (like a radial on a 2 meter ground plane) to the ground terminal of the transmitter. You need one wire for each

band that gives you a problem.

AL N1AL

Date: Thu, 28 Jan 1993 17:00:23 GMT
From: munnari.oz.au!spool.mu.edu!howland.reston.ans.net!paladin.american.edu!
darwin.sura.net!convex!usenet@network.UCSD.EDU
To: info-hams@ucsd.edu

References <C1E2nu.GA3@anomaly.sbs.com>, <C1E5M4.HvK@anomaly.sbs.com>,
<3103@eram.esi.COM.AU>can.ed
Reply-To : tonyp@convex.COM
Subject : Re: Real NoCodes

In article <3103@eram.esi.COM.AU> dave@eram.esi.COM.AU (Dave Horsfall) writes:

[Blasphemous comments about our dear ol' CW operators]...
{
}Real OldFarts think CW is the only efficient means of communications,
}even though advances in DSP technology have long since overtaken them.
}

Real CW OPs threw their computer keyboard in the trash, and built an
interface (out of tubes) so they could use their straight key to input data!

Mine works find EEEEEEEE fine ._._.

: -)

--
Tony J. Podrasky | What's this thing?
San Diego , Ca | It's called a MODEM.
tonyp@convex.com | And what's this button for?
WA2EAA NNNN ZCZC | Whatever you do, don't touc{{{7bh6xx!{@%%hxbd&\$#)\$% NO
CARRIER

End of Info-Hams Digest V93 #128
